

## Industrial Technologies Program

# Boosting Energy Efficiency and Productivity



### Collaborative Partnerships Invest in Major Energy-Saving Advances

**T**hrough greater energy efficiency, U.S. industry can increase productivity and competitiveness while improving our national energy security, environmental performance and economic health. Finding ways to help industry improve its energy efficiency is the work of the U.S. Department of Energy's Industrial Technologies Program (ITP).

#### Advanced Research

The Program works through partnerships with industry to increase the efficiency of industrial energy use. These collaborations research and develop technologies and practices to boost industrial productivity and profits, particularly in energy-intensive industries. The Program also provides cost-shared support to research, development and demonstration (RD&D)

efforts on technologies and processes that are used throughout industry, such as advanced industrial materials and combustion.

Through a competitive solicitation process, the Program provides financial assistance to projects that can accelerate the pace of technology innovation. These partnerships join the expertise of private companies, national laboratories and universities to solve technological challenges. Industry partners typically provide 50 percent or more of project costs over the life of a project.

The Program's RD&D portfolio has produced more than 160 commercialized technologies to date. Collectively, these technologies have saved nearly 4 quadrillion Btu since the Program's inception.

#### Technology Delivery

The Program works with industry to encourage the use of state-of-the-art technologies and best practices for saving energy. ITP provides training, software tools, tip sheets, energy assessments and other resources to help industrial facilities analyze their energy use. The objective is to help plant personnel identify cost-effective opportunities to save energy.







Many achieve significant energy and cost savings by implementing relatively low-cost measures.

To move energy efficiency technologies and practices into use on plant floors, the Program provides a variety of resources for industrial energy management, including an extensive publications library and tool suite. It also fosters efforts to replicate energy savings across companies and entire industries. Resources include:

- **Software systems tools and training**, enabling plants to self-assess their steam, compressed air, fan, pump, motor and process heating systems
- **No-cost assessments** provided to eligible small and mid-size facilities by teams of engineering faculty and students from 26 university-based Industrial Assessment Centers around the country

The Program collaborates within DOE's Office of Energy Efficiency and Renewable Energy's (EERE) programs to transfer technologies and energy management practices to industry. EERE Allied

Partners—including end-users, suppliers, associations and other organizations—help deliver EERE tools, training and information to industrial customers. EERE State Partnerships enhance industry access to R&D and provide for a two-way flow of information on needs and resources.

ITP co-sponsors EERE Technology Showcases, highlighting the benefits of energy efficiency and renewable energy technologies and practices. Showcases may include results of plant energy assessments, presentations on emerging technologies and plant tours featuring advanced technology installations.

### 200 Energy Savings Assessments in 2006

As part of the U.S. Department of Energy's Easy Ways to Save Energy campaign, the Industrial Technologies Program is sending industrial energy experts to 200 industrial facilities that are some of the biggest energy users in the nation. These facilities volunteered to work with experts on Energy Savings Assessments of their steam or process heating systems. The assessments identify opportunities for improvements that could save millions of dollars.



### Accelerating Innovation

The mission of the Industrial Technologies Program is to enhance national energy security and competitiveness by developing technologies to transform the way America uses energy to convert raw materials into finished products. The Industrial Technologies Program partners with diverse stakeholders to achieve the following objectives:

- Reduce reliance on foreign oil
- Reduce environmental impacts
- Increase use of renewable energy
- Improve competitiveness
- Improve process yield and
- Conserve resources



### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.



U.S. Department of Energy

### Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

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